

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/028811

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61K48/00 C12N15/867

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| P,X        | DODART J C ET AL: "Lentivirus - mediated expression of human apolipoprotein E alters brain Abeta burden in an isoform - dependent manner in PDAPP mice." SOCIETY FOR NEUROSCIENCE ABSTRACT VIEWER AND ITINERARY PLANNER, vol. 2003, 2003, pages Abstract No. 730.2 URL-http://sf, XP001204184 & 33RD ANNUAL MEETING OF THE SOCIETY OF NEUROSCIENCE; NEW ORLEANS, LA, USA; NOVEMBER 08-12, 2003 abstract | 1-36                  |
| Y          | WO 97/16458 A (UNIV BOSTON ; KOS HOLDINGS INC (US)) 9 May 1997 (1997-05-09) cited in the application page 9 - page 17<br>-----<br>-/--  | 1-36                  |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

7 December 2004

Date of mailing of the international search report

27/12/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.                         |
|------------|--|---|
| Y          | WO 00/23587 A (INTROGENE BV ; BEKKUM DIRK WILLEM VAN (NL); VERLINDEN STEFAN FREDERIK) 27 April 2000 (2000-04-27) cited in the application pages 3 and 9 page 9   | 1-26  |
| Y          | NALDINI ET AL: "Efficient transfer, integration, and sustained long-term expression of the transgene in adult rat brains injected with a lentiviral vector" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 93, no. 21, 15 October 1996 (1996-10-15), pages 11382-11388, XP002114690 ISSN: 0027-8424 page 11383, column 2, paragraph 2 | 5-8,<br>15-18,<br>31-34                       |
| Y          | BOSCH A ET AL: "REVERSAL OF PATHOLOGY IN THE ENTIRE BRAIN OF MUCOPOLYSACCHARIDOSIS TYPE VII MICE AFTER LENTIVIRUS-MEDIATED GENE TRANSFER" HUMAN GENE THERAPY, XX, XX, vol. 11, no. 8, 20 May 2000 (2000-05-20), pages 1139-1150, XP000939360 ISSN: 1043-0342 Abstract , pages 1142-1143, Figure 4  | 5-8,<br>15-18,<br>31-34                       |
| Y          | BAEKELANDT V ET AL: "CHARACTERIZATION OF LENTIVIRAL VECTOR-MEDIATED GENE TRANSFER IN ADULT MOUSE BRAIN" HUMAN GENE THERAPY, XX, XX, vol. 13, no. 7, 1 May 2002 (2002-05-01), pages 841-853, XP001079520 ISSN: 1043-0342 material and methods : "surgery"   | 5-10,<br>15-21,<br>31-36                      |
| Y          | TALBOT C ET AL: "Protection against Alzheimer's disease with apoE epsilon 2" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 343, 4 June 1994 (1994-06-04), pages 1432-1433, XP002140637 ISSN: 0140-6736 abstract   | 1,3,4,<br>11,13,<br>14,22,<br>23,27,<br>29,30 |
|            | -----<br>-/--  |   |

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.                            |
|------------|---|--|
| Y          | ROYSTON M C ET AL: "APOLIPOPROTEIN E EPSILON 2 ALLELE PROMOTES LONGEVITY AND PROTECTS PATIENTS WITH DOWN'S SYNDROME FROM DEMENTIA"<br>NEUROREPORT, RAPID COMMUNICATIONS OF OXFORD, OXFORD, GB,<br>vol. 5, no. 18,<br>20 December 1994 (1994-12-20), pages 2583-2585, XP000198185<br>ISSN: 0959-4965<br>abstract | 1,3,4,<br>11,13,<br>14,<br>22-24,<br>27,29,30    |
| Y          | -----<br>OYAMA FUMITAKA ET AL: "Apolipoprotein E genotype, Alzheimer's pathologies and related gene expression in the aged population"<br>MOLECULAR BRAIN RESEARCH,<br>vol. 29, no. 1, 1995, pages 92-98,<br>XP002309346<br>ISSN: 0169-328X<br>abstract   | 1,3,4,<br>11,13,<br>14,22,<br>23,25,<br>27,29,30 |
| Y          | -----<br>SJOGREN M ET AL: "Tacrine and rate of progression in Alzheimer's disease: Relation to ApoE allele genotype"<br>JOURNAL OF NEURAL TRANSMISSION, SPRINGER VERLAG, VIENNA, AT,<br>vol. 108, no. 4, 2001, pages 451-458,<br>XP002265850<br>ISSN: 0300-9564<br>abstract                                     | 1-4,<br>11-13,<br>22,23,<br>26-30                |

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## Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 1-36 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---|---------------------|----------------------------|---------------------|
| WO 9716458                                | A | 09-05-1997          | AU 720446 B2               | 01-06-2000          |
|   |   |                     | AU 7552696 A               | 22-05-1997          |
|   |   |                     | BR 9611329 A               | 28-12-1999          |
|   |   |                     | CA 2236274 A1              | 09-05-1997          |
|   |   |                     | EP 0866799 A1              | 30-09-1998          |
|   |   |                     | JP 2000500332 T            | 18-01-2000          |
|   |   |                     | WO 9716458 A1              | 09-05-1997          |
| WO 0023587                                | A | 27-04-2000          | AU 6234099 A               | 08-05-2000          |
|   |   |                     | EP 1121429 A2              | 08-08-2001          |
|   |   |                     | WO 0023587 A2              | 27-04-2000          |
|   |   |                     | US 2002107213 A1           | 08-08-2002          |